911 – What if I drop my landline phone for wireless service?

Will the Dispatcher be able to locate me the same way they did on my landline phone? No. Wireless location accuracy depends on a combination of things:

- If you are inside a dense structure such as metal or concrete it can obstruct the signal
- The terrain, such as trees and hills, will obstruct or distort the signal
- How far you are from the nearest cell tower will effect the signal
- How many bars you have on your phone or your signal strength
- Tower capacity [how busy is the cell tower you are closest to] will determine if the signal will be picked up by that tower, or sent to another tower that may be in a different county
- Service Provider's mobile switching equipment and what network they use

The accuracy of the caller's location is determined by the phone service provider's equipment, the network the service provider uses and by where the caller is, not by the PSAP equipment.

The network your service provider uses may be either hand-set based [the signal captured by a GPS chip in the phone] or a network-based [the location is determined by timing signals emitted by different tower sites] solution or a combination of both to determine your location. So, the longer you can stay on the line, the better your chances are of getting an accurate location signal to the Dispatcher [if you are not inside a dense structure or in very rough terrain where there is no cell service].

What if I am inside a dense structure or have low signal strength, will I still be able to reach a Dispatcher?

The answer is most likely, yes. But the Dispatcher will only get Phase 1 location accuracy which delivers the location of the tower that picks up your signal, your service provider information and [hopefully] your call back number. It does not show where you are. All Public Safety Answering Points [PSAPs] across the State of Iowa are Phase 2 capable. Phase 2 delivers your service provider information, your call back number and your location based on the accuracy of either the handset or network method. The PSAP mapping software converts the latitude and longitude coordinates of Phase 2 to a street address based on the accuracy of your coordinates.